

On page 13, please replace the paragraph between lines 1 and 9 with the following:

The signal  $V(1,t)$  through  $V(N_a,t)$  output from each of the  $N_a$  antenna elements 16-1 through 16- $N$  is input to a respective one of weighting circuits 17-1 through ~~17-N~~ 17- $N_a$  in beam forming network 12 where it is multiplied by an associated one of the aforementioned complex beam forming weights  $W_e(1,ns)$  -  $W_e(N_a,ns)$  calculated for these same signals. The weighted signals output from each of the weighting circuits 17 are summed in summing circuit 18 to form signal  $\text{CopySigT}(ns,t)$  which is the separated copy stream for each of the signals making up signal 21 that is impinging on antenna array 11. Beam forming network 12 is implemented in software, there is one network 12 for each signal being copied and captured, and there are a set of weights for each signal.

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 On page 18, please replace the paragraph <sup>at line</sup> between lines ~~29~~ and 30 with the following:

3, b 1-28-09

$$\begin{aligned} \cancel{Y_T(k, it)} &= B(ns, it) \times ([\text{CopyT}(ns, it)] / [|\text{CopyT}(ns, it)|]) \\ \underline{Y_T(ns, it)} &= B(ns, it) \times ([\text{CopyT}(ns, it)] / [|\text{CopyT}(ns, it)|]) \end{aligned}$$

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On page 23, please replace the paragraph between lines 16 and 20 with the following:

At block 14, utilizing the well known Wiener – Hopf equation, inverse processing is first performed on each of the copy weights  $W_e$ . In block 15 the results of the Wiener – Hopf equation, inverse processing are used to calculate the array steering vector “ $A_{meas}$ ”. In block 23 the array steering vector is used ~~The results are then processed in block 15~~ to determine the angle of arrival ~~(the array steering vector)~~ of each of the individual signals comprising the composite received signal  $E(m,t)$ . The Wiener – Hopf equation is described in further detail below.